Final Project - Othello

You have chosen to create an electronic version of the Othello game. The object of the game is to surround the opponent with your pieces. The images shown below are examples of the game at startup and during game play.

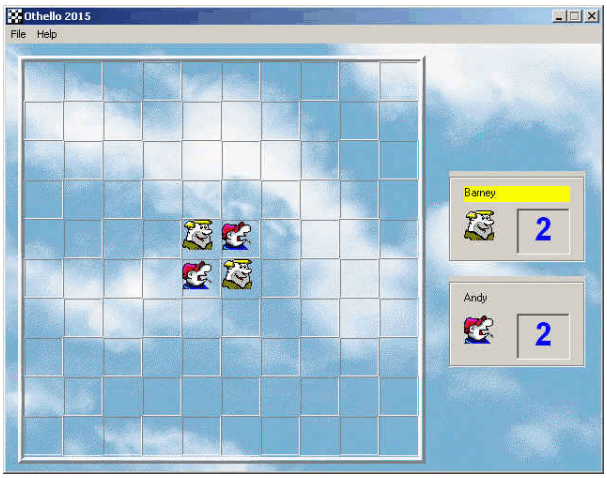

Figure 1: Board at startup

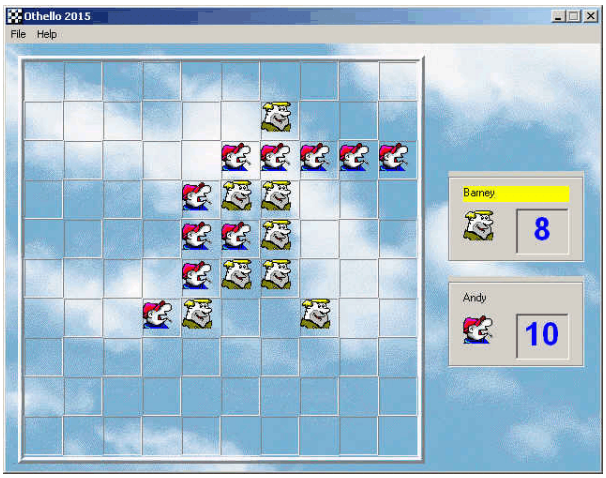

Figure 2: Board during game play (2-player mode)

Instructions

Your program should start by displaying a splash screen for about three seconds and then lead into an options screen where the user can enter their name, choose an image to be represented by, select a background or switch game modes (2 player or against computer). The menu system should allow the user to start a new game, display the options screen, a high score board, an about screen or exit the program.

How to Play

The user is presented with a playing board that has 100 board positions with 2 images of each player in the middle (as shown in Figure 1). Player 1 clicks first on any open tile such that the opposing player is trapped between player 1's pieces (horizontally, vertically or diagonally). Any trapped pieces are now captured and belong to player 1. Once this has been completed, player 2 has a turn to do the same and trap any of player 1's pieces. The game continues in this fashion where the players alternate taking turns.

If the player chooses a one-player mode (against the computer), the program keeps track of the amount of time it takes to finish the game (timer should start with the first click) as well as the number of player pieces on the board. If the player beats the computer, their time is compared to the top 5 high scores. The times of the top 5 scores (including player name and pieces at the end of the game) should be kept in a record file and be displayed at any time by the user when the game is in a 1-player mode..

A game is over when a player has no pieces to move or does not have a valid move to make. The player with the higher number of pieces on the board is declared the winner.

Evaluation

- The first version with the basics (2-player mode, options for player names, images and backgrounds as well as tracking the number of pieces and winner).
- The final version with all the requirements available (1-player mode and high score tracking).
- Project must be handed in on time to receive full marks.
- Hand-in design, program code and user manual (5 - 10 pages, fully illustrated).

Due Date: May 19, 2015 (First Version)

June 1, 2015 (Final Version)

ICS4U Final Project (Othello)	STUDENT'S MARK
INTERFACE □ Overall appearance □ Menu □ Initial screen setup	/10
PROGRAM - Version 1 (Basics) □ Options Screen □ Valid move verification □ Proper changing of surrounded pieces and scoring □ Game Over detection □ Due date met	/15
PROGRAM - Part 2 (Final) □ One-player mode □ Time tracking □ High score ability □ Due date met	/15
CODE □ Code efficiency (constants, variables, formatting, commenting)	/10
USER MANUAL □ Table of contents, (sub)headings, instructions and descriptions, illustrations.	/10
TOTAL MARK:	**/60**